Reliability Panel



**Reliability Panel AEMC** 

# **FINAL REPORT**

Review of the Reliability and Emergency Reserve Trader

21 April 2011

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#### About the AEMC

The Council of Australian Governments, through its Ministerial Council on Energy (MCE), established the Australian Energy Market Commission (AEMC) in July 2005. The AEMC has two principal functions. To make and amend the national electricity and gas rules - and to conduct independent reviews of the energy markets for the MCE.

#### About the AEMC Reliability Panel

The Panel is a specialist body within the AEMC and comprises industry and consumer representatives. It is responsible for monitoring, reviewing and reporting on the safety, security and reliability of the national electricity system and advising the AEMC in respect of such matters. The Panel's responsibilities are specified in section 38 of the National Electricity Law (NEL).

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# **Executive Summary**

On 5 July 2010, the Australian Energy Market Commission (AEMC) provided the Reliability Panel (Panel) with the Terms of Reference (ToR) for a review of the Reliability and Emergency Reserve Trader (RERT). The Panel was required to undertake a review to determine if the RERT should expire in line with the National Electricity Rules on, or prior to, 30 June 2012, or whether the RERT should be extended beyond the current expiry date, and if so, to what date. Specifically, the Review was to:

- consider if the RERT mechanism is required to ensure that the reliability of supply meets the relevant power system security and reliability standards, or to maintain power system security;
- examine the potential and/or actual effectiveness of the RERT arrangements; and
- consider the National Electricity Objective (NEO) contained in section 7 of the National Electricity Law (NEL) when it considers issues that arise in the review and making associated recommendations.

## Is the RERT required?

The Panel considers that the RERT is not required to ensure the reliability of electricity supply. Market performance to date has adequately ensured the reliability and security of electricity supply, while forecasts expect sufficient reserves for a number of years in most regions to maintain reliability.

The Panel considers that the current Reliability Settings provide incentive for sufficient capacity to ensure the reliability of the electricity supply. However, looking further ahead, there may be a point where the Reliability Settings are no longer an effective mechanism for delivering power system reliability. This is the basis for the Panel's recommendation, below, that the AEMC review the mechanisms for achieving reliability and the risk allocation framework.

The Panel notes that there are stakeholders whose core business may be affected by the expiration of the RERT. For this reason, the Panel is recommending that the RERT be extended for one year as a transitional arrangement. This will also allow greater time for recommendations from ongoing work on demand side participation to the implemented.

### Is the RERT effective?

The Panel considers that the effectiveness of the RERT is limited. This is primarily due to the limited participation in the RERT to date. This means that there is unlikely to be sufficient capacity available for use through the RERT to address any significant supply shortfall. In its current form, the RERT may be useful in addressing small, location specific, supply shortfalls of short duration.

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### **Panel's recommendations**

The Panel's recommendation is that the RERT should expire on 30 June 2013. The Panel also recommends that the requirement for the review of the RERT mechanism be removed from the Rules.

Furthermore, the Panel recommends that the AEMC undertake a review of both the mechanism for the delivery of capacity to ensure reliability, and the impact of the risk allocation framework in the National Electricity Market (NEM) on achievement of reliability in the long term.

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# 1 Introduction

This chapter sets out the context for this review, including the Terms of Reference (ToR) requirements and the powers of the Reliability Panel (Panel). It also sets out the background for the Review and the history of the Reliability and Emergency Reserve Trader (RERT). Finally, it outlines the other mechanisms that are available to help ensure reliability of supply in the NEM.

## 1.1 Context

## 1.1.1 Requirements in the Rules

In the National Electricity Rules (NER or Rules), rule 3.20 provides for the RERT and its operation. The Rules specify that the RERT is to expire on 30 June 2012, or alternatively on a date determined by the Australian Energy Market Commission (AEMC) on the advice of the Panel in accordance with clause 3.20.9 of the Rules. Under clause 3.20.9 of the Rules, the Panel must, no later than one year prior to the date that the RERT is due to expire, complete a review of the RERT. The Panel is required to conduct the review in accordance with the process specified in clauses 8.8.3(d) to (l) of the Rules.

## 1.1.2 Terms of Reference

On 5 July 2010, the AEMC provided the Panel with the ToR for a review of the Reliability and Emergency Reserve Trader (RERT Review). The AEMC requested the Panel to undertake the review in accordance with section 38 of the National Electricity Law (NEL), clause 8.8.3(c) of the Rules and the National Electricity Objective (NEO). A copy of the Terms of Reference is provided in Appendix A of this Final Report.

In accordance with the ToR, the Panel is required to undertake a review of the RERT arrangements under the Rules to determine whether the mechanism should expire on, or prior to 30 June 2012, or whether the RERT should be extended beyond the current expiry date, and, if so, to what date.

The ToR specify that the RERT Review should:

- consider if the RERT mechanism is required to ensure that the reliability of supply in a region or regions meets the relevant power system security and reliability standards and where practicable, to maintain power system security;
- examine the potential and/or actual effectiveness of the RERT arrangements as specified in the Rules; and
- consider the NEO contained in section 7 of the NEL when it considers issues that arise in the review and when making associated recommendations.

The ToR indicate that the Panel, in assessing the above, is not required to consider whether alternative arrangements should be put in place of the RERT.

The Panel is required to submit a written report to the AEMC on the RERT Review setting out its recommendations, supporting reasoning, and the procedure followed by the Panel in undertaking the review.<sup>1</sup> On receipt of this report, the AEMC, taking into account the report, may make a determination that the RERT is to expire and specify the date of expiry.<sup>2</sup>

Clause 8.8.3(i) of the Rules also requires that the Panel must take into consideration the policy statements, directions or guidelines published by the AEMC from time to time. Other than the ToR, no policy statements, directions or guidelines were provided to the Panel from the AEMC for this review.

## 1.1.3 Review procedure

Milestone	Date
Publication of Issues Paper	3 August 2010
Public Forum	2 September 2010
Close of submissions on Issues Paper	17 September 2010
Publication of the Draft Report	24 December 2010
Close of submissions on Draft Report	10 February 2011
Public Meeting	3 March 2011
Publication of Final Report	21 April 2011

The following key dates outline the completed process for this Review.

The Panel has undertaken this review in accordance with the Rules consultation procedures set out in rule 8.9 of the Rules and has consulted with stakeholders throughout the review. Submissions were invited on the Issues Paper and the Draft Report.

On 3 August 2010 the Panel published an Issues Paper seeking initial comments from stakeholders on this review. Submissions closed on 17 September 2010. Ten submissions were received. On 24 December 2010 the Panel published the Draft Report and sought comments from stakeholders on the draft recommendations. Submissions closed on 10 February 2011. There were seven submissions received. All submissions are available on the AEMC website.<sup>3</sup>

The Panel has held two public meetings in Melbourne on this review, on 2 September 2010 and 3 March 2011. Presentations from the meeting on 2 September 2010 are

<sup>1</sup> Clause 8.8.3(j) of the Rules.

<sup>2</sup> Clause 3.20.9(d) of the Rules.

<sup>&</sup>lt;sup>3</sup> The AEMC website can be found at www.aemc.gov.au.

available on the AEMC website. There were no stakeholder presentations at the 3 March 2011 forum.

## 1.2 Background

## 1.2.1 Current RERT mechanism

Under the Rules, the current RERT mechanism allows the Australian Energy Market Operator (AEMO) to intervene in the market to ensure reliability of supply and to maintain power system security. That is, the RERT enables AEMO to contract for additional reserves up to nine months ahead of a period where reserves are projected to be insufficient to meet the relevant power system security and reliability standards, and, where practicable, to maintain power system security and dispatch these additional reserves should an actual shortfall occur. AEMO can contract for reserve under a range of timeframes, including:

- at least ten weeks notice of a reserve shortfall (long-notice RERT);
- between ten and one weeks notice of a reserve shortfall (medium-notice RERT); and
- between seven days and three hours notice of a reserve shortfall (short-notice RERT).

The RERT is implemented by AEMO and allows:

- AEMO to obtain capacity that may not otherwise be available to the market;
- parties who have non-market generation capacity to make themselves known to AEMO and to declare what price those parties seek to be paid to use that capacity; and
- individuals or groups of consumers to declare what remuneration they would seek to have their load shed, in excess of the saving in energy cost.

The Rules determine that the costs for contracting for reserves are shared between the affected jurisdictions, following consultation with the relevant jurisdictions.<sup>4</sup> Market Customers in these jurisdictions are allocated a share of the regional costs, based on their relative energy consumption between 8am and 8pm on a business day when the RERT is exercised.<sup>5</sup>

In order to implement the RERT, the Rules require the Panel to publish guidelines which outline the operation of the RERT.<sup>6</sup> AEMO must have regard to these

<sup>&</sup>lt;sup>4</sup> Under clause 3.20.3(c) of the Rules.

<sup>&</sup>lt;sup>5</sup> In accordance with clause 3.15.9(e) of the Rules.

<sup>6</sup> Under clause 3.20.8 of the Rules.

guidelines, where relevant, when exercising the RERT. In addition, AEMO is required to publish RERT procedures which detail the operation of the RERT.<sup>7</sup>

In June 2010, the Panel published the amended RERT Guidelines which include amendments which were approved by the AEMC as part of the Improved RERT Flexibility and Short-notice Reserve Contracts Rule.<sup>8</sup> On 24 November 2010, AEMO completed its consultation on the Procedure for the exercise of the RERT.<sup>9</sup>

The RERT has a sunset clause in the Rules of 30 June 2012, with a requirement for the Panel to review the need for the RERT by 30 June  $2011.^{10}$ 

## 1.2.2 Original Reserve Trader Provisions

Since the commencement of the National Electricity Market (NEM), the market operator (which is now AEMO) has had the power to contract for reserves (termed "reserve trading"). Reserve trading essentially enabled the market operator to procure additional reserves if a shortfall of reserves was forecast. It acted as a "safety net" in the event that the NEM did not deliver sufficient reserves to ensure that the Reliability Standard of 0.002% unserved energy (USE) was met.

Over time, the power for the market operator to operate the Reserve Trader has been reviewed and the associated sunset clause extended. In December 2005, the Panel submitted a Rule change proposal to extend the Reserve Trader provisions until 30 June 2008. The Rule change was accepted with minor amendments and allowed the Reserve Trader to continue to operate while the Panel completed its Comprehensive Reliability Review (CRR).

# 1.2.3 Development of the RERT in the Comprehensive Reliability Review

On 21 December 2007 the Panel completed its CRR, which was a comprehensive review of a number of high level NEM standards and parameters, including the Reliability Standard and Reliability Settings (the market price cap (MPC), market floor price and the cumulative price threshold (CPT)). The RERT was developed as part of this review and was incorporated into the Rules in June 2008. The RERT redesigned the original Reserve Trader provisions. The main operational changes included:

• allowing the market operator to contract for reserves up to nine months ahead of a projected shortfall, instead of six months; and

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<sup>7</sup> Under clause 3.20.7 of the Rules.

<sup>8</sup> The amended RERT Guidelines were published in accordance with clause 11.31.3(d) of the Rules. More information is available on the AEMC website at http://www.aemc.gov.au/Electricity/Rulechanges/Completed/Improved-RERT-Flexibility-and-Short-notice-Reserve-Contracts.html.

<sup>9</sup> More information is available on the AEMO website at http://aemo.com.au/electricityops/rert.html.

<sup>&</sup>lt;sup>10</sup> These requirements are in clauses 3.20.1 and 3.20.9 of the Rules.

• allowing the market operator to perform multiple tendering rounds, instead of being limited to one, so that the level of reserve contracting can be adjusted as more information becomes available.

In making this recommendation, the Panel considered that the prevailing market conditions, including the tighter supply-demand conditions that were likely to be experienced over the next few years, were such that the reserve trader provisions were necessary at the time.<sup>11</sup> These conditions were partly due to the effects of drought and risks from uncertain environmental policy. The Panel considered that given the tighter supply-demand balance, it would not be prudent to remove a key safety net provision such as the Reserve Trader.

## 1.2.4 Amendment to the RERT for critical emergencies

In March 2009, as part of the Review of the Operational Arrangements for the Reliability Standards, the Panel reviewed the need and possible design of a short-notice version of the RERT that could be used in a critical emergency. The subsequent Rule change proposal was approved by the AEMC and the Rules were amended to:

- provide for long-notice, medium-notice and short-notice reserve contracting;
- clarify that AEMO can form a RERT panel; and
- clarify that AEMO may use reserve contracts during system security events.<sup>12</sup>

In making this recommendation, the Panel still considered that the RERT was a market distortion, but considered that prudent incremental improvements to the RERT were warranted to further increase the flexibility. The Panel noted that the proposed changes aimed to minimise the market distortion and that the RERT would be subject to a review prior to its scheduled expiration on 30 June 2012.<sup>13</sup>

# 1.2.5 Use of the Reserve Trader

Since the start of the NEM, the reserve trader has been used twice by the National Electricity Market Management Company (NEMMCO).<sup>14</sup> NEMMCO contracted for 84 MW of additional reserves for the South Australian and Victorian regions for February 2005 based on forecasts in mid-late 2004 which showed a potential shortfall of

<sup>&</sup>lt;sup>11</sup> AEMC Reliability Panel, Comprehensive Reliability Review, Final Report, December 2007, p.76.

<sup>&</sup>lt;sup>12</sup> The Commission determined to make the Rule and published its final Rule determination and Rule on 15 October 2009. For more information see: National Electricity Amendment (Improved RERT Flexibility and Short-notice Reserve Contracts) Rule 2009 No. 19, available on the AEMC website at http://www.aemc.gov.au/Electricity/Rule-changes/Completed/Improved-RERT-Flexibility-and-Short-notice-Reserve-Contracts.html.

AEMC Reliability Panel, Review of the Operational Arrangements for the Reliability Standard: Final Report, 21 December 2009, p.45.

<sup>&</sup>lt;sup>14</sup> On 1 July 2009 NEMMCO's responsibilities were transferred to AEMO.

195 MW. The cost of acquiring these services was \$1.035m. NEMMCO also acquired an additional 375 MW of reserves for the same regions for the summer of 2005/06 based on delays in the commissioning of Basslink and Laverton North power station. Acquiring these services cost approximately \$4.4m. In both cases the reserves were not dispatched as conditions during those periods were favourable.<sup>15</sup>

The Panel notes that since the introduction of the current RERT mechanism in 2009, one participant has joined the RERT panel. Furthermore, the current RERT has not yet been exercised by AEMO.<sup>16</sup>

# 1.3 Other mechanisms for ensuring reliability in the NEM

## 1.3.1 Reliability Settings

The Reliability Settings (the MPC, CPT and market floor price) are the key price envelopes within which the wholesale spot market seeks to balance supply and demand, and deliver capacity to meet the Reliability Standard (i.e. 0.002% USE) with the aim of avoiding unmanageable risks for market participants. The level of the MPC and the market floor price are crucial because they provide key signals for supply and demand-side investment and usage. For example, if the MPC is set too high, Market Customers (retailers or consumers that are directly exposed to the spot price) and generators can be exposed to very large financial risks. However, if set too low, there may be insufficient incentives to invest in new generation capacity and demand-side response to meet the Reliability Standard.

The CPT is an explicit risk management mechanism designed to limit participants' exposure to protracted levels of high prices in the wholesale spot market. If the sum of the half-hourly wholesale market spot prices over a rolling seven-day period exceeds this threshold, AEMO must impose an administered price cap (APC). The APC is specified in a schedule that is developed, authorised, published and varied by the AEMC. The APC is currently ±\$300/MWh for all regions of the NEM, for all time periods.

## 1.3.2 Market information

AEMO publishes information over a range of time horizons, to inform the market of the current and projected levels of available reserves in relation to the minimum reserve levels (MRLs). One purpose of these processes is to inform market participants of periods of low reserves, which are expected to broadly correspond to periods of high prices, in order to elicit a market response. In the short term, this may encourage market participants to make capacity available. For example, some generators may reschedule maintenance. In the longer term, this may encourage investment in additional capacity in the associated regions. Another purpose of these processes is to

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<sup>&</sup>lt;sup>15</sup> AEMC Reliability Panel, 2006, Comprehensive Reliability Review - Issues Paper, p.42.

<sup>16</sup> AEMO, Submission on the Consultation on the Amended RERT Guidelines Draft Report, 12 April 2010, p.1.

determine whether the available reserves are likely to be sufficient to meet the Reliability Standard and, where appropriate and allowed under the Rules, whether intervention is required to increase the available reserves.

These processes are discussed below.

### **Electricity Statement of Opportunities**

The Electricity Statement of Opportunities (ESOO) is prepared annually and provides a three to ten year projection of the supply demand balance for both summer and winter maximum demand conditions. The ESOO includes projections of the maximum summer and winter demands under different economic growth conditions, the available installed generation in each region and the available demand side response.

## Power System Adequacy

In 2010, AEMO produced the first Power System Adequacy report which provides an assessment of the NEM's operational outlook for a two year period. AEMO considers the power system adequacy against the following measures:

- capacity reserve supply capacity per region is assessed against 10% probability of exceedence demand;
- energy reserve considers issues such as fuel restrictions, hydro reserves, cooling limits etc.;
- frequency control the ability to manage electrical islands following regional separation;
- interconnector capability the likelihood of interconnectors limiting interregional transfers;
- post contingency control the ability to withstand a single credible contingency; and
- voltage control the likelihood of voltage control issues.

This report assesses the adequacy of the supply/demand balance for the upcoming two years and what if any actions are being proposed by AEMO. This report informs participants of the short term operational issues.

In the most recent Power System Adequacy report, AEMO found that the power system was expected to have sufficient supply capacity to meet both the forecast peak demand and the minimum reserve level for all NEM regions.<sup>17</sup>

<sup>17</sup> AEMO, Power System Adequacy - Two Year Outlook, 2010, p.2.

#### Medium-term PASA

The medium-term projected assessment of system adequacy (PASA) process calculates projected available reserves on a daily basis over the upcoming two-year period. The results are updated weekly and are based on the availability information provided by market participants.

The outputs of this process are the reserve levels in each region. AEMO issues low reserve condition (LRC) notices<sup>18</sup> when it considers that the medium-term capacity reserves have fallen below the MRLs required to meet the Reliability Standard.

## Short-term PASA

The short-term PASA process calculates projected available reserves on a trading interval basis over the upcoming week. The results are updated every two hours and are based on the availability information provided by market participants.

The outputs of the short-term PASA process are the reserve levels in each region. As above, AEMO may issue LRC notices if necessary. In addition, AEMO issues lack of reserve (LOR) notices when it considers that the short-term capacity reserves for the period being assessed have fallen below that necessary to withstand one or two credible contingencies.

There are three LOR conditions (LOR1, LOR2 and LOR3) that relate to the severity of the system conditions in terms of the number of contingencies that can occur before involuntary load shedding occurs:<sup>19</sup>

- Under LOR1, there are insufficient short-term reserves to provide complete replacement of the contingency capacity reserve following a critical single credible contingency event;
- Under LOR2, the occurrence of a critical single credible contingency event is likely to require involuntary load shedding; and
- Under LOR3, involuntary load shedding would be, or is actually, occurring in order to maintain or restore power system security.

### **Pre-dispatch**

The pre-dispatch process calculates projected market outcomes on a trading interval basis from the next trading interval to the final trading interval of the day for which all dispatch bids and offers have been received. This process provides market participants with projections of spot prices and expected dispatch schedules to assist them to

<sup>&</sup>lt;sup>18</sup> The requirements for LRC notices are under clause 4.8.4(a) of the Rules.

<sup>&</sup>lt;sup>19</sup> The requirements for LOR1, LOR2 and LOR3 notices are contained in clauses 4.8.4(b), (c) and (d) of the Rules.

determine when to commit their generating units and allows AEMO to issue LRC and LOR notices that also assist market participants' decision making.

## **Energy Adequacy Assessment Projection**

The Energy Adequacy Assessment Projection (EAAP) is an information gathering and dissemination mechanism that enables the market to forecast and respond to projected times where there may be energy constraints that would affect reliability.<sup>20</sup> For example, such an energy constraint may be a drought that limits the generation from hydro generating units and thermal units that rely on cooling water from inland reservoirs.

The purpose of the EAAP is to inform stakeholders, including market participants, of periods of low energy availability.

## 1.3.3 Market intervention

### Directions

As a last resort mechanism to maintain supply and security reliability, AEMO has the power to issue directions to a Registered Participant with scheduled plant or a market generating unit, if AEMO considers it necessary to maintain or re-establish the power system to a secure, satisfactory or reliable operating state.<sup>21</sup>

Directions fall into three categories. These are energy, market ancillary services or other services. Compensation for directions is paid to both directed participants and affected participants (as determined by AEMO).

### Instructions

Under clause 4.8.9 of the Rules, AEMO may issue instructions. These instructions are very similar to AEMO's directions powers, but apply to registered participants with non-market, non-scheduled generating units or loads. This power is also used to maintain or re-establish the power system to a secure, satisfactory or reliable operating state. There is no compensation paid to instructed participants.

<sup>&</sup>lt;sup>20</sup> The requirements for the EAAP are in rule 3.7C of the Rules.

<sup>&</sup>lt;sup>21</sup> Under clause 4.8.9 of the Rules.

# 2 Panel's recommendation

This chapter sets out the Panel's final recommendation, including transitional arrangements, and how this recommendation meets the NEO.

## 2.1 Final recommendation

The Panel recommends that the RERT should expire on 30 June 2013. The Panel also recommends that the requirement for a review of the RERT mechanism (clause 3.20.9 of the Rules) should be removed from the Rules. The Panel intends to submit a rule change proposal to the AEMC to this effect.

On balance, the Panel considers that the RERT mechanism is no longer required and has become an unnecessary market distortion, given the reliability outlook and current investment incentives in the market.

To date, market performance has been sufficient to ensure the security and reliability of the electricity supply. The NEM has consistently met the Reliability Standard, and adequate investment has been announced, despite market uncertainty. Furthermore, the outlook for reliability shows that all regions in the NEM are forecast to have sufficient reserves until 2015/16, with the exception of Queensland which is forecast to have a shortfall in 2013/14.<sup>22</sup>

In addition, the Panel notes that the effectiveness of the current RERT mechanism is limited. The current RERT may be effective in addressing relatively small, location-specific, supply shortfalls.<sup>23</sup> However, to date, the RERT has typically attracted amounts of capacity that are relatively small in the context of any events that result in USE.

The Panel therefore considers that the RERT is not required to ensure that the reliability of supply in a region or regions meets the relevant power system security and reliability standards, or to maintain power system security where practicable. The Panel takes the view that removing the RERT mechanism is consistent with the energy market design and will ensure that market customers face efficient costs.

Furthermore, the Panel recommends that the AEMC undertake a review of both the mechanism for delivery of the capacity to ensure reliability, and the impact of the risk allocation framework in the NEM on achievement of reliability in the long term.<sup>24</sup> Recent reviews, including the Review of the Reliability Standard and Reliability Settings, noted that raising the MPC and the CPT increases the costs and risks in the market, and if there are barriers to managing these risks, then there may be a point at

AEMO, 2010, Electricity Statement of Opportunities, pp.148-154.

<sup>&</sup>lt;sup>23</sup> For example, only one participant has joined the RERT panel since the current RERT was introduced in 2009. AEMO, Issues Paper submission, p.3.

<sup>&</sup>lt;sup>24</sup> AEMC Reliability Panel, Final Report of the Review of the Reliability Standard and Reliability Settings, 30 April 2010, p.x.

which the Reliability Settings may no longer be an efficient mechanism for achieving power system reliability.<sup>25</sup> These reviews considered the performance of the current market design should be monitored to determine if the market design remains resilient and sustainable over time.

The Panel notes that there is some residual risk of short-term supply shortfall, with or without the RERT. Under the current Reliability Standard, the maximum permissible USE is 0.002% of the annual energy consumption for the associated region or regions per financial year. Operationally, it is planned to achieve an expected USE that is within the Reliability Standard each financial year and compliance is measured over the long term.<sup>26</sup> The Reliability Standard is an expectation that a level of reliability will be achieved over the long term. However, the Reliability Standard is not a guarantee that the power system will not exceed the USE for a particular region. Rather, the Reliability Standard is a statistical measure that accounts for variability in the actual reliability achieved for a given year.

Finally, in reaching this recommendation, the Panel notes that it is difficult to obtain empirical evidence to support arguments for either retaining or removing the RERT. Therefore, much of the analysis on the RERT has been qualitative rather than quantitative.

## 2.1.1 Is the RERT required to ensure reliability?

The Panel considers that the RERT is not required to ensure that the reliability of supply in a region or regions meets the relevant power system security and reliability standards or to maintain power system security.

As described above, market performance to date has adequately ensured the reliability and security of the electricity supply while forecasts expect sufficient reserves for a number of years in most regions.

In the longer term, the Panel recently reviewed the levels of the MPC and CPT in the Review of the Reliability Standard and Reliability Settings. In this review, the Panel considered that an MPC of \$12 500/MWh would provide incentive for sufficient capacity to present to the market to ensure reliability of the electricity supply. This is discussed further in section 3.1.1 of this report.

<sup>&</sup>lt;sup>25</sup> AEMC Reliability Panel, Final Report of the Review of the Reliability Standard and Reliability Settings, 30 April 2010, p.x; and AEMC, Final Report of the Review of the Effectiveness of NEM Security and Reliability Arrangements in light of Extreme Weather Events, 31 May 2010, pp.125-127.

<sup>&</sup>lt;sup>26</sup> In April 2010, the Reliability Panel completed the Reliability Standard and Reliability Settings Review. As part of this Review, the Panel determined that from 1 July 2012, performance of the NEM should be considered against the Reliability Standard with the objective of providing continuous improvement to the processes that monitor and maintain reliability, rather than the current practice of measuring compliance against a ten year moving average. More information can be found at www.aemc.gov.au/Market-Reviews/Completed/Review-of-the-Reliability-Standardand-Settings.html.

The Panel notes that there are a number of other mechanisms that help to ensure the reliability of the electricity supply. Such mechanisms include market information which AEMO publishes on a variety of timeframes and market intervention mechanisms, such as directions for scheduled plant or market generating units, or instructions for registered participants for any other action. These mechanisms were described in section 1.3 of this report.

## 2.1.2 Is the RERT effective?

The Panel has examined the effectiveness of the RERT arrangements and considers that the effectiveness of the RERT is limited. In its current form, the RERT may be useful in addressing small supply shortfalls of short duration. However, given the limited amount of capacity available under the RERT, the Panel does not consider that the RERT would be effective in addressing any significant supply shortfall events and is therefore inconsequential in ensuring that the Reliability Standard (0.002% USE) is achieved. .

While the RERT provides an opportunity for both the supply and demand sides to provide capacity that may not otherwise be available to the market, the Panel notes that participation in the RERT has been limited. Since its introduction in 2009, only one participant has joined the RERT panel.

This limited participation in the RERT restricts its effectiveness as there may be insufficient capacity to address a supply shortfall. Alternatively, the limited RERT capacity may be unavailable due to further restrictions on its capacity such as the time of day of the outage, or the length of the notice period.

# 2.2 Transitional arrangements

The Panel recognises that there are stakeholders, particularly those who work with the demand side, whose core business may be affected by the expiration of the RERT. For this reason, the Panel recognises the need for transitional arrangements. The Panel considers that delaying the expiry of the RERT for one year, to 30 June 2013, will provide these market participants with adequate notice of the change.

Secondly, the Panel notes that there is ongoing work on the role of the demand side in the electricity market.<sup>27</sup> While the Panel considers it is more efficient for the demand side to participate directly in the NEM, it notes that the RERT mechanism provides an avenue for demand side participation. The Panel notes that extending the RERT by one year to provide sufficient notice to the market of its expiry, will allow greater time for recommendations from the ongoing work regarding demand management to be implemented.

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<sup>&</sup>lt;sup>27</sup> For example, the Ministerial Council on Energy (MCE) work program on Demand Side Participation including the National Smart Meter Program and the National Stakeholder Steering Committee; the Australian Government's Smart Grid Smart City initiative; AEMO's consultation on the Small Generator Framework, and the proposed further MCE review of demand side participation (DSP) in the electricity market.

## 2.3 The National Electricity Objective

The AEMC provided the Panel with ToR for this review in which the Panel needed to take into account the NEO when undertaking the review process. Under section 7 of the NEL:

"The objective of this Law is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to —

- (a) price, quality, safety, reliability and security of supply of electricity; and
- (b) the reliability, safety and security of the national electricity system."

Having considered the issues raised in the submissions to the Issues Paper and Draft Report and in the Public Forums,<sup>28</sup> and its own analysis, the Panel is satisfied that its recommendation to allow the RERT to expire and to remove the provisions for further review of the RERT from the Rules satisfies the requirements of the NEL and will, or is likely to, contribute to the achievement of the NEO. The Panel considers its recommendation will or is likely to contribute to achievement of the NEO in the following areas:

- efficient investment in electricity services;
- efficient use of electricity services;
- price of supply of electricity; and
- reliability of the national electricity system.

It has previously been recognised by both the Panel and stakeholders that the RERT (and the previous reserve trader) is a distortionary mechanism.<sup>29</sup> In an earlier review of the reserve trader, the Panel considered:<sup>30</sup>

"although the Reserve Trader provisions are a market distortion which would not be necessary under ideal conditions, the prevailing market conditions are such that a revised form of the provisions needs to be maintained for a defined period of time. Ideally, in the longer-term, the

<sup>28</sup> See Chapter 3 of this Report. All submissions and forum presentations are available on the AEMC website at: www.aemc.gov.au.

For example: AEMC Reliability Panel, Comprehensive Reliability Review, Final Report, December 2007, Sydney, p.76; AEMC, Improved RERT Flexibility and Short-notice Reserve Contracts, Rule Determination, 15 October 2009, p.18; Energy Supply Association of Australia (esaa), Review of the RERT, Draft Report submission, p.2; NGF and Energy Retailers Association of Australia (ERAA), Review of the RERT, Draft Report submission, p.3; Origin Energy, Review of the RERT, Draft Report submission, p.2.

<sup>&</sup>lt;sup>30</sup> AEMC Reliability Panel, Comprehensive Reliability Review, Final Report, December 2007, Sydney, p.76.

market should be able to operate without the need for a distortionary intervention mechanism."

At that time, the Panel considered that given there were uncertain market conditions, particularly regarding the impact of drought conditions, potential tighter supplydemand conditions and climate change policies, the removal of provisions for AEMO to reserve trade would not be prudent.

However, the Panel now considers that the market has shown to perform adequately and has delivered additional capacity, notwithstanding ongoing uncertainty in the market. Since the commencement of the NEM, and particularly since the introduction of the RERT, market performance has been sufficient to ensure the security and reliability of electricity supply.<sup>31</sup> Furthermore, the outlook for reliability shows sufficient reserves for most regions for a number of years.<sup>32</sup>

Currently, under the RERT, capacity can be valued at a price that is higher than the maximum price it could receive for participating directly in the electricity market, that is, the MPC. This means that during market failure conditions (i.e. when the RERT is invoked due to a lack of available capacity), retailers, and therefore consumers, could face costs that are unknown and difficult to manage through contracting.

The Panel considers that it is more efficient for capacity to participate directly in the market, however the RERT may create a secondary market for reserves that encourages providers of peak reserves to contract with AEMO, rather than a retailer or other intermediary. For example, in the extreme, it is possible that currently non-scheduled capacity that could be economic in the market seeks to obtain additional revenue through the RERT. Under the RERT, the prices paid for reserve are set administratively and are not transparent to the market. In this example, there would be no additional capacity, however the economic costs may increase as the capacity may be remunerated more generously through the RERT than through the market. The end result would be an increase in costs faced by consumers. In addition, this situation would undermine the market mechanism as it would lessen the incentives for generators, retailers and customers to enter into negotiated contracts, and may deter investment in the NEM in the long term, as investors may choose to participate in the RERT instead.

With the expiry of the RERT there would be greater incentive for this capacity to be market facing and therefore to contract with retailers or other intermediaries. This would mean the costs faced by customers, could be smaller and limited (i.e. not greater than the MPC). In addition, the investment signals for investors may be clearer.

<sup>&</sup>lt;sup>31</sup> There have been only two occasions in the period between 2000-01 and 2009-10 where the USE has breached the Reliability Standard in a region. AEMC Reliability Panel, Annual Market Performance Review, Final Report, 23 December 2010, pp.12-13.

<sup>&</sup>lt;sup>32</sup> AEMO, 2010 Electricity Statement of Opportunities, pp.148-154. All NEM regions are expected to have sufficient reserves until 2015/16, with the exception of Queensland which is expected to have a shortfall in 2013/14.

The Panel also notes that allowing the RERT to expire will remove the administration costs to AEMO of activities undertaken to:

- obtain offers of prospective capacity;
- understand the technical nature and potential limitations of each offer;
- consult with jurisdictions; and
- monitor the need to invoke the contracts at its disposal.

The Panel considers that given the performance of the market to date, there is no longer any need for consumers to continue to face these higher prices. Furthermore, the Panel notes that the RERT itself has inadequacies. In particular, the ability of the RERT to address situations of supply shortfall is limited, as the RERT typically attracts a response that is relatively small in the context of those events that may result in USE.

The Panel therefore considers that removing the RERT will further the long term interests of consumers by promoting more efficient use of, and investment in, capacity in the market. The recommendation is expected to also remove inefficient costs for consumers.

# 3 Key issues from stakeholders

This chapter sets out the key issues that were raised in submissions from stakeholders on the Issues Paper and Draft Report.

## 3.1 Market distortion

The Panel has previously noted that since the introduction of the reserve trader, there has been concern about the impact of such a mechanism on the market and the potential for intervention mechanisms to diminish incentives for the market to respond to reserve shortfalls.<sup>33</sup> Currently under the Rules and the RERT Guidelines, AEMO is required to minimise the distortionary effect on the operation of the market.<sup>34</sup> In addition, the market operator is only able to contract for reserves for a short period prior to the anticipated shortfall (currently this is nine months) to avoid diminishing market signals.

Some submissions on the Issues Paper and Draft Report considered that, despite these precautions, the RERT creates a secondary market for reserves and encourages providers of peak reserves to participate indirectly in the market, by contracting with AEMO, rather than participating directly by contracting with a retailer.<sup>35</sup> These submissions considered that this approach was less efficient and was blunting the signals for generators, retailers and customers to enter into commercially negotiated contracts. In the long term, this may deter investment in the NEM as investors participate in the reserve market instead.

In contrast, other submissions considered that the distortionary effects of the RERT were not significant.<sup>36</sup> They noted that the RERT is only operated in those areas that experience shortfall and is only used for a limited amount of time, as required.

In a supplementary submission, the National Generators Forum (NGF), Energy Retailers Association of Australia (ERAA) and Loy Yang Marketing Management Company (LYMMCO) presented a qualitative report from ACIL Tasman on the distortionary effects of the RERT. The report noted that the existence of the RERT is a consequence of the MPC and CPT. ACIL considered that the use of the RERT created an economic inefficiency that was the difference between the value to consumers of consumption beyond the quantity supplied at the MPC and the opportunity cost of the

<sup>&</sup>lt;sup>33</sup> For example, AEMC Reliability Panel, Review of the Reliability and Emergency Reserve Trader (RERT) Issues Paper, 3 August 2010, pp.19-20.

<sup>&</sup>lt;sup>34</sup> Clause 3.20.2(b)(1) of the Rules and section 5.1 of the RERT Guidelines.

<sup>&</sup>lt;sup>35</sup> Origin Energy, Issues Paper submission, p.2; Origin Energy, Draft Report submission, p.1; NGF and ERAA, Issues Paper submission, p.3; NGF and ERAA, Draft Report submission, p.2.

<sup>&</sup>lt;sup>36</sup> South Australian Department of Transport, Energy and Infrastructure (DTEI), Issues Paper submission, p.1; Energy Response, Issues Paper submission, p.3; Major Energy Users (MEU), Issues Paper submission, p.13.

extra resources that would be used to provide additional supply greater than the amount offered at the MPC.  $^{\rm 37}$ 

In a submission on the Draft Report, the Victoria Department of Primary Industries (DPI) considered that the RERT "represents a secondary distortion that is necessary given the existence of the MPC arrangements which serve to dull market incentives and which transfer risk away from generators and retailers and onto consumers, thereby increasing the potential for emergencies".<sup>38</sup> The DPI considered that the RERT should be retained to maintain supply reliability and as a necessary response to market distortions associated with an MPC and CPT that, in its opinion, are set too low.<sup>39</sup>

## 3.1.1 Panel's response

While the Panel considers that the direct market distortions of the RERT may be small, the Panel acknowledges that the RERT may have secondary impacts that distort the market. The RERT may be more attractive to some demand side participants ahead of the primary market. For example, participants with whom retailers may be unwilling to contract such as those with strict restrictions on availability (i.e. the timing of the outage, or the length of the notice period) may find the RERT more attractive. The Panel agrees with submissions that this capacity would be more efficiently used if it were to contract directly with retailers or other intermediaries rather than with AEMO through the RERT.

Regarding the setting of the MPC and CPT, the Panel recently reviewed these settings as part of the Review of the Reliability Standard and Reliability Settings. The Panel considers that an MPC of \$12 500/MWh will provide incentive for sufficient capacity to present to the market in order to ensure meeting the Reliability Standard. The AEMC recently published its draft determination on a rule change proposal from the Panel which seeks to maintain the real value of the MPC and CPT over time through indexation.<sup>40</sup> The AEMC agreed with the proposal to introduce a mechanism to index the MPC and CPT. In agreeing with the proposal to maintain the real value of these settings over time, the AEMC considers that the MPC and CPT are set at an appropriate level at this time. The Panel is of the view that the RERT is not required as a safety-net mechanism.

## 3.2 Market costs

Under the current Rules, the maximum price of the reserve contracted and dispatched through the RERT is effectively decided by representatives of each of the NEM

<sup>37</sup> ACIL Tasman, NEM Reliability and Emergency Reserve Trader: Assessment of distortions arising from arrangement, 17 November 2010, p.6.

<sup>&</sup>lt;sup>38</sup> DPI, Draft Report submission, p.2.

<sup>&</sup>lt;sup>39</sup> DPI, Draft Report submission, p.4.

<sup>40</sup> See http://www.aemc.gov.au/Electricity/Rule-changes/Open/Reliability-Settings-from-1-July-2012.html for more information.

jurisdictions in response to an offer by reserve providers.<sup>41</sup> Clause 3.20.2(b)(2) of the Rules requires that:

"actions taken should aim to maximise the effectiveness of *reserve contracts* at the least cost to end use consumers of electricity."

A number of Issues Paper submissions noted that payment under the RERT is not limited to the MPC.<sup>42</sup> These submissions considered that any reserve that was efficient to use should not be valued at a price beyond the market value (the MPC). In contrast, other submissions considered that the RERT is a low cost, risk management strategy.<sup>43</sup> The Major Energy Users (MEU) considered that the cost of installing new standby generation is significantly higher than the cost of standby capacity provided by the reserve trader.<sup>44</sup> The South Australian Department of Transport, Energy and Infrastructure (DTEI) noted that the costs of the RERT are minimal when compared to the costs in the market overall. In particular, any additional costs are only incurred by consumers when reserve is required.<sup>45</sup>

The NGF and ERAA also considered that there was an inconsistency in the value of achieving a secure operating state, in that RERT capacity that is used to achieve system security may be paid higher than the MPC, while under normal market processes, this capacity would only be paid up to the MPC.<sup>46</sup>

Under the Rules, AEMO may also intervene in the market by giving a direction to a registered participant for any action if AEMO considers that such action is necessary to maintain or re-establish the power system to a secure operating state, a satisfactory operating state, or a reliable operating state.<sup>47</sup> Directed participants are paid compensation for the provision of energy or market ancillary services under a direction.<sup>48</sup> This compensation is calculated according to clause 3.15.7(c) of the Rules and cannot be greater than the MPC. In addition, directed participants may also make a claim for additional compensation for lost revenue and additional net direct costs incurred, such as fuel or maintenance costs, where these costs exceed \$5 000 for a single trading interval.<sup>49</sup> There is no upper limit for claims of such costs, however, any claim from a directed participant where the claim is equal to or greater than \$20 000 and the

<sup>&</sup>lt;sup>41</sup> Clauses 3.20.3(c) and (f) of the Rules require AEMO to consult with the affected jurisdictions on whether to enter into reserve contracts and to assess how the associated costs will be shared between these jurisdictions.

<sup>42</sup> LYMMCO, Issues Paper submission, p.2; NGF and ERAA, Issues Paper submission, p.6; esaa, Issues Paper submission, p.3.

<sup>&</sup>lt;sup>43</sup> MEU, Issues Paper submission, p.11; MEU, Draft Report submission, p.10; DTEI, Draft Report submission, p.1.

<sup>44</sup> MEU, Issues Paper submission, p.11.

<sup>&</sup>lt;sup>45</sup> DTEI, Issues Paper submission, p.1.

<sup>&</sup>lt;sup>46</sup> NGF and ERAA, Issues Paper submission, p.4.

<sup>47</sup> Under clause 4.8.9 of the Rules.

<sup>48</sup> See clause 3.15.7 of the Rules.

<sup>&</sup>lt;sup>49</sup> Under clause 3.15.7B of the Rules.

additional intervention claim<sup>50</sup> is equal to or greater than \$100 000 must be referred to an independent expert to determine the claim. The MEU noted in its Draft Report submission that compensation for participants who are the subject of such a direction by AEMO has no upper limit.<sup>51</sup>

## 3.2.1 Panel's response

While the current Rules require AEMO to take those actions which are most effective and minimise the cost to end use consumers, the Panel recognises that in conditions when the RERT is invoked (this includes both reliability and system security events), capacity can be valued above the MPC. This is higher than the price this capacity would receive by participating directly in the electricity market. In such situations, retailers, and therefore consumers, could face costs that are not limited to any upper boundary and therefore could be difficult to hedge. The Panel considers that given the performance of the market to date, there is no longer any need for consumers to continue to face these higher prices. As such, the Panel is recommending that the RERT be allowed to expire on 30 June 2013.

The Panel also notes that there is an anomaly regarding the value of system security under the RERT when compared with market processes; however, given its recommendation that the RERT expire in 2013, the Panel considers that such an anomaly can be tolerated in the short term.

The Panel notes that under the Rules, any participant that is directed by AEMO can claim for compensation. Such claims for compensation for directed participants have no upper limit but are cost based. The Panel notes that such claims are limited as any directed participant claiming additional compensation must itemise each component of the claim and provide sufficient data and information for AEMO, or an independent expert, to substantiate a claim.<sup>52</sup> Under the RERT mechanism, the maximum price paid for capacity is determined by each jurisdiction and is based on bids from the capacity provider.

## 3.3 Demand Side Participation

A number of Issues Paper submissions noted that the RERT may encourage the demand side to participate through the RERT, rather than in the primary market.<sup>53</sup> These submissions considered that these services cannot be justified at a cost higher than the MPC and therefore participating in the primary market would be more economically efficient for the market as a whole.

<sup>&</sup>lt;sup>50</sup> An additional intervention claim is the sum of the total claim made by the directed participant, affected participant adjustment claims and market customer additional claims. See clause 3.12.2(k) of the Rules.

<sup>51</sup> MEU, Draft Report submission, p.9.

<sup>52</sup> See clause 3.15.7B(b) of the Rules.

<sup>&</sup>lt;sup>53</sup> LYMMCO, Issues Paper submission, p.2; NGF, Issues Paper submission, p.3; esaa, Issues Paper submission, p.3.

A number of submissions on the Draft Report commented on the role of the demand side in providing capacity to the NEM. In particular, some submissions considered that processes to facilitate DSP should be unrelated to the RERT.<sup>54</sup> Views in submissions ranged from support for work to address barriers to efficient demand side participation<sup>55</sup> to those who considered that a new market mechanism should be created to attract demand side resources.<sup>56</sup>

## 3.3.1 Panel's response

The Panel agrees with submissions that demand side capacity would be more efficiently used if it were to contract directly with retailers or other intermediaries rather than with AEMO through the RERT. This would allow market participants to make contracting decisions that are most efficient for each participant.

Regarding the role of the RERT in providing an avenue for demand side participation in the NEM, the Panel notes that the purpose of the RERT is to allow AEMO to contract for reserves when a shortfall of reserve is projected. While the RERT provides an opportunity for both the supply and demand sides to provide capacity, the Panel considers that the RERT is more likely to attract demand side capacity as most supply side capacity would already plan to be available for the peak demand periods.

As previously noted, there is ongoing work on the role of the demand side in the electricity market.<sup>57</sup> The Panel notes that the RERT mechanism provides an avenue for demand side participation, even though it may be more efficient for the demand side to participate directly in the NEM. The Panel notes that the transitional arrangements to extend the RERT by one year will allow greater time for recommendations from this ongoing work to be implemented.

## 3.4 Need for a capacity mechanism

A number of submissions on both the Issues Paper and the Draft Report noted that the current RERT mechanism was not effective in attracting capacity.<sup>58</sup> However, some submissions considered that there was a need for a safety net mechanism to ensure

<sup>&</sup>lt;sup>54</sup> DPI, Draft Report submission, p.4; esaa, Draft Report submissions p.2; NGF and ERAA, Draft Report submission, p.3.

<sup>&</sup>lt;sup>55</sup> esaa, Draft Report submission, p.2.

<sup>&</sup>lt;sup>56</sup> DTEI, Draft Report submission, p.1; EnerNOC, Draft Report submission, p.4.

<sup>57</sup> For example, the MCE work program on Demand Side Participation including the National Stakeholder Steering Committee; the Australian Government's Smart Grid Smart City initiative; AEMO's consultation on the Small Generator Framework, and the proposed further MCE review of DSP in the electricity market.

<sup>58</sup> Energy Response, Issues Paper submission, p.1; EnerNOC, Draft Report submission, p.4; esaa, Draft Report submission, p.1; MEU, Draft Report submission, pp.7, 9; NGF and ERAA, Issues Paper submission, p.4; NGF and ERAA, Draft Report submission, p.2;

reliability of supply<sup>59</sup> or to encourage DSP<sup>60</sup>. The MEU and EnerNOC proposed improvements to the RERT which they considered would increase its ability to attract capacity, particularly the demand side.<sup>61</sup> DTEI considered that if the RERT was to be removed, it should be replaced by a more certain form of reserve provision.<sup>62</sup>

## 3.4.1 Panel's response

The Panel does not consider, given the current market performance, that there is a need for a safety net mechanism to ensure reliability. The Panel considers that the current Reliability Settings are sufficient to ensure reliability and the RERT is no longer required. Furthermore, the Panel notes that the RERT mechanism is not intended to be a driver for new investment, instead there are other mechanisms, such as the MPC which serve this purpose.

In the longer term, the Panel considers that there may be a point at which the Reliability Settings may no longer be an efficient mechanism for achieving power system reliability, given that increasing the MPC and the CPT increases the costs and risks in the market, and there may be barriers to managing these risks. The Panel notes that the ToR from the AEMC for this Review stated that the Panel "is not required to consider whether alternative arrangements should be put in place".<sup>63</sup> Given the above, the Panel is recommending that the AEMC undertake a review of the mechanisms for achieving reliability, including the mechanism for delivery of capacity to ensure reliability, and the impact of the risk allocation framework in the NEM on the achievement of reliability in the long term.

## 3.5 Uncertainty in the market

A number of submissions on both the Issues Paper and the Draft Report commented on the impact of ongoing uncertainty on investment in the market.<sup>64</sup> In a submission on the Issues Paper, the NGF and ERAA considered that, despite several years of uncertainty around carbon policies, AEMO's 2010 ESOO shows that the market is working well.<sup>65</sup> Origin Energy noted that forecast supply deficits are an important

<sup>&</sup>lt;sup>59</sup> DTEI, Issues Paper submission, p.1; DTEI, Draft Report submission, p.1; DPI, Issues Paper submission, p.3; DPI, Draft Report submission, p.4; Energy Response, Issues Paper submission, p.1; MEU, Draft Report submission, p.11.

<sup>&</sup>lt;sup>60</sup> Energy Response, Issues Paper submission, p.4; EnerNOC, Draft Report submission, p.1; MEU, Draft Report submission, pp.11-12.

<sup>&</sup>lt;sup>61</sup> MEU, Draft Report submission, pp.11-12; EnerNOC, Draft Report submission, p.4.

<sup>62</sup> DTEI, Draft Report submission, p.1.

<sup>63</sup> AEMC, Review of the Reliability and Emergency Reserve Trader (RERT Review) - AEMC Terms of Reference to the Reliability Panel, p.2.

<sup>&</sup>lt;sup>64</sup> For example, NGF and ERAA, Issues Paper submission, p.4; Origin Energy, Issues Paper submission, p.1; Department of Primary Industries Victoria, Draft Report submission, p.3; ERAA, Draft Report submission, p.2; EnerNOC, Draft Report submission, p.1.

<sup>&</sup>lt;sup>65</sup> NGF and ERAA, Issues Paper submission, p.4.

function of the market as they indicate the need for additional generation. If the market is working effectively, investment should occur in a timely manner.<sup>66</sup>

However, in submissions on the Draft Report, the DPI considered that the RERT should be retained as the climate for investment in new generation is significantly more uncertain than it has been previously<sup>67</sup>, while EnerNOC considered that a lack of investment in the NEM may be becoming a significant matter.<sup>68</sup>

## 3.5.1 Panel's response

The Panel notes that the outlook for reliability shows that the majority of the NEM regions are expected to have sufficient reserves up to  $2015/16.^{69}$  Since 2009, there have been eight new major generation projects completed, with a combined registered capacity of approximately 2 305 MW<sup>70</sup> and as of the end of October 2010, there were twelve projects at an advanced stage of development with a total capacity of 1 768 MW.<sup>71</sup>

The Panel notes that, historically, when the Statement of Opportunities (SOO) has forecast a supply deficit, the market has delivered sufficient capacity. The Panel considers that to date, market performance has been sufficient to ensure the security and reliability of electricity supply, although the Panel makes no comment on the commerciality of these projects. The Panel considers that given the performance and outlook for capacity and reliability in the NEM, the RERT is no longer required.

# 3.6 Extension of RERT until 2013

A number of submissions on the Draft Report agreed with the Panel's draft recommendation to allow the RERT to expire, however, they did not agree with the recommendation that the RERT should be extended for one year until 2013.<sup>72</sup> The esaa and the NGF and ERAA submissions questioned the value of extending the RERT for a year to allow work on DSP to be completed.<sup>73</sup> They considered that the purpose of the RERT was as a mechanism to support reliability, rather than as a sectorial mechanism to support the demand side.

<sup>&</sup>lt;sup>66</sup> Origin Energy, Issues Paper submission, p.1.

<sup>&</sup>lt;sup>67</sup> Department of Primary Industries Victoria, Draft Report submission, pp.3-4.

<sup>68</sup> EnerNOC, Draft Report submission, p.1.

<sup>&</sup>lt;sup>69</sup> AEMO, 2010 Electricity Statement of Opportunities, pp.148-154.

<sup>70</sup> AEMO, ESOO 2010, p.87; Australian Bureau of Agriculture and Resource Economics - Bureau of Rural Sciences, Electricity Generation: Major development projects - October 2010 listing, p.8.

<sup>71</sup> Australian Bureau of Agriculture and Resource Economics - Bureau of Rural Sciences, Electricity Generation: Major development projects - October 2010 listing, p.9.

<sup>72</sup> esaa, Draft Report submission, p.2; NGF and ERAA, Draft Report submission, p.3; Origin Energy, Draft Report submission, p.1.

raft Report submission, p.1; NGF and ERAA, Draft Report submission, pp.2-3.

#### 3.6.1 Panel's response

The Panel considers that there is value in extending the RERT for one year in order to provide sufficient notice of the expiry of the RERT to those stakeholders whose core business will be affected, particularly those who provide demand side capacity to the market. In addition, extending the RERT will provide additional time for outcomes from current work programs on demand side participation to be implemented.

# Abbreviations

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
APC	administered price cap
СРТ	cumulative price threshold
CRR	Comprehensive Reliability Review
DSP	demand side participation
EAAP	Energy Adequacy Assessment Projection
ESOO	Electricity Statement of Opportunities
LOR	lack of reserve
LRC	low reserve condition
MCE	Ministerial Council on Energy
MPC	market price cap
MRL	minimum reserve level
NEL	National Electricity Law
NEM	National Electricity Market
NEMMCO	National Electricity Market Management Company
NEO	National Electricity Objective
NER	See Rules
Panel	Reliability Panel
PASA	projected assessment of system adequacy
RERT	Reliability and Emergency Reserve Trader
Rules	National Electricity Rules
SOO	Statement of Opportunities

ToR	Terms of Reference
USE	unserved energy

# A AEMC Terms of Reference



#### Review of Reliability and Emergency Reserve Trader

#### (RERT Review)

#### AEMC Terms of Reference to the Reliability Panel

29 June 2010

#### Introduction

The National Electricity Rules (Rules) currently provide for a Reliability and Emergency Reserve Trader (RERT) mechanism that allows AEMO to intervene in the market to ensure reliability of supply and to maintain power system security. That is, the RERT enables AEMO to contract for additional reserves up to nine months ahead of a period where reserves are projected to be insufficient to meet the relevant power system security and reliability standards, and, where practicable, to maintain power system security and to dispatch these additional reserves should an actual shortfall occur.

The RERT was primarily designed to manage only small levels of reserve shortfalls that are not enduring. It was considered by the Reliability Panel, that in the longer term, the market should ideally be able to operate without the need for a potentially distortionary mechanism such as the RERT<sup>1</sup>. Therefore, the Rules specify that the RERT has a sunset period for its operation.

#### Scope of this Review

Clause 3.20.1 of the Rules specifies that the RERT is to expire on 30 June 2012, or on a date determined by the AEMC on the advice of the Reliability Panel in accordance with clause 3.20.9 of the Rules. Clause 3.20.9 requires that the Reliability Panel, must, no later than one year prior to the RERT is due to expire, complete a review of the RERT arrangements.

In accordance with clause 3.20.9 of the Rules, the AEMC requests the Panel to undertake a Review of the RERT mechanism and recommend to the AEMC:

<sup>&</sup>lt;sup>1</sup> AEMC Reliability Panel Rule change proposal, NEM Reliability Settings Information, Safety Net and Directions, February 2008, p.11.

- (1) whether the RERT should expire on, or prior to, the date specified in clause 3.20.1 of the Rules (that is 30 June 2012); or
- (2) whether the RERT should be extended beyond the current expiry date referred to in subparagraph (1) and, if so, to what date.

In undertaking the Review, the Panel should:

- consider if the RERT mechanism is required to ensure that the reliability of supply in a region or regions meets the relevant power system security and reliability standards and where practicable, to maintain power system security; and
- examine the potential effectiveness and/or actual effectiveness of the RERT arrangements as specified in the Rules.

The Panel in assessing the above is not required to consider whether alternative arrangements should be put in place. The Panel is also requested to consider the national electricity objective (NEO) contained in section 7 of the National Electricity Law (NEL) when it considers issues that arise in the review and when making associated recommendations.

#### **Process and Timing**

Clause 3.20.9(b) of the Rules requires that the Panel must conduct the RERT Review in accordance with clauses 8.8.3(d) - (l) of the Rules. The AEMC also requests that the Panel involve stakeholders in the Review by seeking stakeholder submissions on key reports and hold a public forum regarding the Review. This stakeholder consultation should be included into the Panel's workprogram and timetable for the Review.

Whilst it is noted that 30 June 2011 is the timeframe provided for under the Rules for the Panel's final report, the AEMC considers that in the interests of ensuring investment certainty for the market, the Panel should submit its report as soon as practicable.